Note 1: The further spectrum requirements for any of the Global CDMA, TDMA/FDMA and Regional European systems, in addition to amounts identified in the table, shall be considered on a case by case basis by the CEPT ERC when such requirements are identified to meet system design criteria or to cater for the growth in traffic.

Note 2: The designation of frequencies to Regional European systems shall be such that those employing CDMA and TDMA technology be implemented starting from the frequency limit separating CDMA and TDMA systems.

Note 3: Global systems or Regional systems which meet the milestone criteria identified in Annex 2 may operate within the band, subject to successful frequency co-ordination with other services. The specific bands within which these system may operate in the long term shall be identified in due course.

Note 4: A Regional European system is a system with a service area that is not global but extending over Europe or part thereof with the possible inclusion of a region outside of Europe; Regional and European systems that can be coordinated with Global systems must use the band segment designated for Global systems.

Note 5: The band segments for Global systems must be used by systems that cover part of ITU Region 2 or parts of ITU Regions 1 and 3 non-adjacent to Europe. The band limits to the Global systems are subject to review in accordance with Decides 6.

Note 6: This 2 x 20 MHz bandwidth identified is for the introduction of global and regional-European S-PCS systems to be implemented before 1 January 2001. It is expected that with further discussions the bandwidths required for various systems to be implemented before 1 January 2001 will be further refined. Although the identification of the bands would assist the deployment of S-PCS, it is expected that the actual migration of existing systems will be subject to the actual implementation of S-PCS.

## [3. Notification by the satellite network operator of the completion of the Critical Design Review

#### Clarification:

To determine that real progress has been made in the manufacture of the spacecrafts, thus by-passing shost contracts, and spacer satellites; reference should be made to the Critical Design Review, which is the stage in the spacecraft implementation process, where the design and development phase ends and the manufacturing phase starts.]

#### 4. Satellite launch contract

Clarification and definition:

The satellite launch contract would establish the binding agreement to launch satellites to provide a commercial service. This contract with detail of launch dates, launch services and the launch indemnity contract should be available for inspection by the ERC. The required confidentiality to be agreed between the participating members of the ERC and the other party (satellite operator) concerned.

# 15. Notification by the satellite network operator of the completion of the Coupled Loading Analysis

Clarification and definition:

To determine that real progress has been made toward launch, thus by-passing .ghost contracts.; reference should be made to the Coupled Loading Analysis which is the stage in the satellite launching process, where mechanical and environmental compatibility between the launch vehicle and the spacecraft is achieved.]

## [6. Successful frequency coordination within the CEPT

Clarification and definition:

To be developed.]

### 7. Contract for gateway stations

Clarification and definition:

The contract for the construction and installation of gateway stations would establish the binding agreement to establish gateways to provide a commercial service. This contract should be available for inspection by the MRC. The confidentiality required

#### Appex 2

# <u>Milestones for the introduction of S-PCS within the bands 1610 - 1626.5 Milz, 2483.5 - 2500 Milz, 1980 - 2010 MHz and 2170 - 2200 Milz</u>

#### INTRODUCTION

The key milestones listed below relating to the bringing into operation of each of the S-PCS have been arranged in chronological order.

[A Milestone Review Committee (MRC) shall be established in order to examine whether the milestone criteria are met for the satellite systems applying for spectrum in the band covered by this Decision. It will only be composed of members of those CEPT administrations that have committed themselves to apply this Decision.]

#### **MILESTONES**

- 1. Submission by the administration responsible for the satellite system of the request for coordination (information according to Appendix 3 to the Radio Regulations) to the ITU
- 2. Satellite manufacturing contract

Clarification and definition:

This relates to a binding agreement (commitment to fund; see Note) for the manufacture of satellites. The contract should identify the construction milestones leading to the completion of manufacture of satellites [and progress payments] required for the commercial service provision. The documents relating to this agreement, signed by the satellite network operator and the satellite manufacturing company, must be available for inspection by the MRC. The confidentiality required has to be agreed between the members of the MRC and the other party (satellite operator) concerned.

Note: If the satellites are manufactured by the same company representing the satellite network operator, then the decision to manufacture satellites will amount to a commitment made by the company and not a contract issued by the company. In this case the necessary documentation should be made available for inspection by the MRC.

has to be agreed between the members of the MRC and the other party (satellite operator) concerned.

#### 8. Launch of satellites

. Comment from the United Kingdom:

This milestone may <u>not</u> be required since the milestone on <u>launch</u> contract should identify the <u>launch</u> dates for the satellites required for the commercial services. Thus the compliance with the <u>launch</u> schedule should be examined the previous milestone.

#### Comment from Iridium:

This milestone should be maintained. This event is not subsumed under the launch contract, but is a separate event in its own right. The difference is one of promise versus performance. The launch contract milestone is significant because it evidences a serious intent to launch a system. The actual launch is significant because it is an effectuation of the commitment and the confirmation that the operator has spent even more funds to launch the satellite actually.

#### 9. Provision of the satellite service within CEPT

#### Clarification and definition:

The commercial service should be available before the beginning of the year [2000][2001] in the 1.6/2.5 GHz bands and before the beginning of the year 2001 in the 2 GHz bands with the number of spacecraft identified under the previous milestones having been launched and available for services within the CEPT. [It should be noted that certain S-PCS services planned for operation within the frequency bands identified in the Decision do not provide 100% coverage of the CEPT. Thus the compliance with the milestone should mean provision of service within the coverage area identified at the outset by the satellite network operator.]

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#### DRAFT PROCEDURE FOR HARMONISED INTRODUCTION OF S-PCS

#### Purpose

The purpose of this document is twofold:

- give a general overview of the procedure to be set up for handling applications for a licence for S-PCS spectrum.
- identify the questions that need to be answered before the procedure can be finalised.

#### The Procedure

An overview of the procedure is given in the flow chart attached to this document. The most important issues are:

Before any applications can be taken into consideration eertain requirements and criteria will have to be complied with. The appropriate teams of ERC and ECTRA will have to co-operate to define these requirements and criteria.

A separate, independent committee will advise the administrations on the issue whether or not an application or an applicant fulfilled the stated requirements and criteria.

Administrations will only take into account applications that are accompanied by the opinion of the committee.

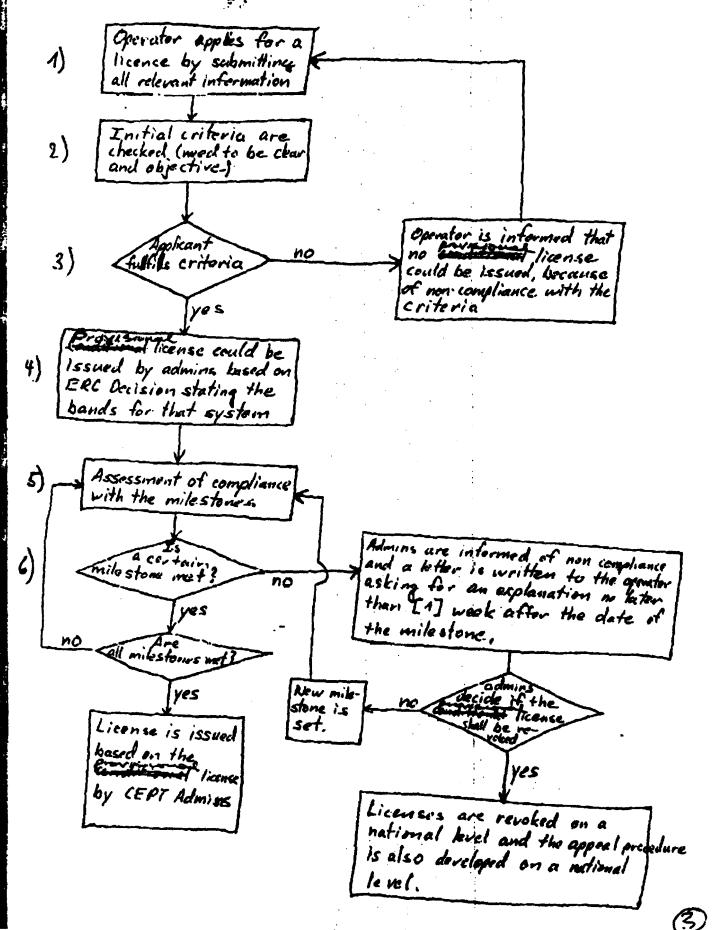
An applicant that meets the initial requirements and criteria will have to meet additional milestones before a licence is issued. Failure to meet those milestones may result in the rejection of the application. In that case the spectrum concerned may be reallocated.

#### Questions that need to be answered

Before finalizing the procedure, the following questions need to be answered:

- what are the requirements and criteria to be met before an application is taken into condition?
- what are the responsibilities and the competence of the committee that advises on the compliance with the criteria and milestones?
- what means does this committee have to perform its duties?
- What will be the legal basis for this committee?
  - \* no formal basis?
  - \* ERC decision?
  - \* other?
- What will be the role of the administrations and what is the relationship between administrations and the committee??
- How is this committee to be formed?
  - \* a CEPT created body such as a project team or a group?
  - \* another body such as an MoU?

# Procedure for Harmonised Introduction of S-ACS Example for further discussion



## Clarifications to the Flow Chart

The flow chart gives an example of a procedure for the harmonised introduction of S-PCS in Europe. It is meant to facilitate discussion within the relevant CEPT bodies on the procedures and entities needed in order to award licenses and designate frequencies to an S-PCS operator.

Below are some clarifications to the different steps in the procedure.

- 1. Applicants must submit all relevant information. CEPT must identify what this information is, ie what are the initial criteria, what are the milestones? etc.
- 2. An entity (committee) must check the initial criteria. Initial criteria could be the request for coordination (ITU), financial criteria, technical criteria, etc. The list of criteria needs to be established.
- 3. If the initial criteria are not met the operator is informed accordingly and no provisional license is issued. A provisional license means that a license is issued subject to the fulfilment of the milestones (see 5)
- 4. Administrations issue a provisional license preferably based on an ERC Decision for that system. In this way it will be possible to make a decision in a harmonised way i.e. the frequencies for a particular system can be harmonised across Europe. Based on the information submitted by the applicant this Decision could also contain the date of the milestones to which the operator must comply.
- 5. An entity must assess and review the milestones that have been set for a particular system. Milestones are clear and unambiguous achievements within the development of a satellite system which show that the system is on its way to becoming reality. Examples of milestones are contracts for the building of satellites, launch contracts, operation of the system etc.
- 6. If on the date that a certain milestone should be fulfilled by a particular operator this operator has not shown its compliance, then administrations are informed accordingly and an explanation from the operator is asked for. Based on the explanation administrations should decide in a harmonised way, i.e. on an international level if a new milestone date is to be set or if the provisional license is to be revoked.

#### **CERTIFICATE OF SERVICE**

I, Teresita V. Vitug, do hereby certify that a true and accurate copy of the foregoing "Reply Comments of TRW Inc." was served this 16th day of August, 1996 by first-class mail, postage pre-paid, on the following persons:

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